Comparison of Economic Status of Elderly Households: Nonmetropolitan Versus Metropolitan Residence

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Elderly households in nonmetropolitan areas have lower economic status than do their metropolitan counterparts, as determined by several measures: Income, expenditures, and financial assets. Data from the 1990-94 Consumer Expenditure Survey indicate that nonmetropolitan elderly households have 80 to 83 percent as much income and 79 to 82 percent as much expenditures as metropolitan elderly households. We find that after controlling for age, education, gender, marital status, race, home ownership, and presence of at least one earner in the household, nonmetropolitan and metropolitan differences persist, but as expected, are somewhat smaller. The multivariate models that control for demographic characteristics indicate that nonmetropolitan elderly households have 83 to 88 percent as much income and 81 to 85 percent as much expenditures as metropolitan elderly households. We discuss the public policy implications of these persistent nonmetropolitan and metropolitan differences in economic status.

As the number and percentage of elderly people in the United States continue to increase, there is much concern over the financial well-being and economic status of this growing segment of the population. For 50 years, the elderly population has benefitted from the creation and expansion of public programs and, as a whole, has experienced increases in income and wealth and declines in poverty rates *(14)*. These improvements in economic status, however, conceal high risks of poverty still faced by some subgroups of the elderly population.

Previous research has linked economic well-being of the elderly population to age, living arrangements, gender, marital status, and race *(2,3,7,8,11,13)*. However, in research examining risks of poverty and low economic status among the elderly, geographic location has received less attention. The limited research that has compared nonmetropolitan and metropolitan elders confirms the relative economic disadvantage of nonmetropolitan elders.[1] For example,

[1]The U.S. Bureau of the Census defines a metropolitan area as a county or counties containing a place or urbanized area of 50,000 people or more with a total population of 100,000, including adjacent communities that have a high degree of economic and social integration with the central city. A nonmetropolitan area refers to counties outside a metropolitan area. The metropolitan and nonmetropolitan focus is used in this research because work and residence patterns are likely to be tied more closely to metropolitan and nonmetropolitan residence than to urban/rural residence.

nonmetropolitan elderly households are more likely to be poor and to have lower incomes, compared with their metropolitan counterparts *(6,8,10,15)*. Compared with elders in urban and metropolitan areas, elders living in rural and nonmetropolitan areas are more sparsely located and receive less media attention *(5)*.

Research analyzing differences by geographic location of residence is important because the elderly are over-represented in rural and nonmetropolitan areas. About three times as many elders live in metropolitan areas as in nonmetropolitan areas. Elderly people, however, make up higher percentages of nonmetropolitan populations, compared with metropolitan populations *(19)*.

Income is the most commonly used indicator of economic status. Income captures one resource of elderly households but ignores the use of savings or accumulated financial assets that elders can use to meet current economic needs. For example, income flow generally decreases dramatically when people retire, but retired people often use savings and other assets to purchase goods and services. If these resources are ignored, the economic status of the elderly will be underestimated. Thus, measures of household expenditure or financial assets may be important indicators of economic status, particularly for elderly households.

Measures of economic status should be adjusted for household need to represent more accurately a household's economic status *(4)*. Measures of total household income and total household expenditure ignore differences in need across households of different sizes. If household size is ignored, the relative economic status of larger households will be overestimated. Per capita and equivalent measures are frequently used to adjust for household need. Per capita estimates are obtained by dividing household resources by the number of persons living in the household. This measure implies that household need (and therefore cost) increases proportionately as household size increases *(1)*. Equivalent estimates are obtained by dividing household resources by a household equivalence factor, allowing for economies of scale that vary with size of the household and characteristics of household members *(12)*.

Differences in economic status of nonmetropolitan and metropolitan elderly households may be partially explained by nonmetropolitan and metropolitan differences in demographic characteristics that are related to economic status. Research has established that being relatively young, more educated, married, and White are associated positively with the economic status of the elderly population *(2,3,7,8,11,13)*.

Also, nonmetropolitan and metropolitan differences in economic status may be partially explained by differences in ‘‘opportunity structures’’ in nonmetropolitan versus metropolitan areas. ‘‘Opportunity structures’’ refers to potential residential and employment opportunities in a geographic area. It also refers to socioeconomic characteristics of the area that influence the availability and quality of employment and the likelihood different groups of people have for obtaining employment *(16)*. People living in nonmetropolitan areas face different economic and labor market opportunities than do those living in metropolitan areas *(17)*. People in nonmetropolitan areas often have more limited choices; they are less likely than their metropolitan counterparts to pursue postsecondary education and are more likely to have low-paying, unstable jobs *(5)*. These disadvantages persist through people's years in the labor market and influence the level of resources that are available to them to pay for goods and services during retirement.

This study contributes to the research on differences in the economic status of elderly households in nonmetropolitan versus metropolitan areas. It examines the magnitude of differences in economic status by using multiple measures of economic status. Further, multivariate analysis is used to examine whether nonmetropolitan and metropolitan differences in economic status remain when other demographic correlates of economic status are controlled. Thus, the persistence of a nonmetropolitan and metropolitan difference in a multivariate framework would support the theory that residential and employment opportunities in specific geographic areas influence differences in economic status.

Methods

Data and Sample

The data for this research are from the interview component of the 1990-94 Consumer Expenditure Survey (CE) conducted by the U.S. Bureau of the Census for the U.S. Bureau of Labor Statistics (BLS) *(20)*. The CE's data on income, expenditure, and total liquid financial assets were used to construct indicators of economic status for each household. Household is used to refer to a BLS consumer unit. The BLS defines a consumer unit as (1) all members of a particular housing unit who are related by blood, marriage, adoption, or other legal arrangements; (2) two or more people living together who pool their incomes to make joint expenditure decisions; or (3) a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent *(20)*. For this study, only households that were interviewed in four consecutive quarters (excluding the initial bounding interview) between the first quarter of 1990 and the fourth quarter of 1994 were included. Expenditures over the four consecutive quarters were summed to obtain actual annual household expenditure for each household. All dollar values were adjusted to 1994 dollars.

To be included in the analysis, households had to be complete income reporters. Ninety percent of nonmetropolitan elderly households and 89 percent of metropolitan elderly households in the sample were classified by BLS as complete income reporters. A household is classified as a complete income reporter if the respondent provides values for major sources of income, such as wages and salaries, self-employment, and Social Security. Also, to be included, the householder had to be 65 years old or older, and the household could not contain children less than 18 years old. Households with dependent children have different needs and available resources. Thus, they were expected to differ systematically from households without dependent children.

The final sample consisted of 3,334 elderly households: 751 nonmetropolitan and 2,583 metropolitan. About 25 percent of elderly *persons* live in nonmetropolitan areas *(19)*. The unit of analysis for this research is *households* with a householder 65 years old or older. About 23 percent of the elderly *households* in the sample were located in nonmetropolitan areas.

Measures of Economic Status

Multiple measures of economic status were used to compare the economic status of nonmetropolitan and metropolitan elderly households because there is no agreement on the best measure to use. By using several measures, we were able to determine whether the results differed based on the empirical measure used. The measures differed both in the specific economic resource measured (i.e., income, expenditure, and financial assets) and in the method used to adjust for household needs (i.e., per capita and equivalent measures). The specific measures consisted of total, per capita, and equivalent annual household income and expenditure and the value of household financial assets: the sum of money in savings, checking, and brokerage accounts, U.S. savings bonds, stocks, bonds, mutual funds, and securities. (See box.)

Per capita household income (expenditure) was calculated by dividing total household income (expenditure) by the number of persons living in the household. Equivalent household income (expenditure) was calculated by dividing total household income (expenditure) by the household's equivalence factor implicit in the U.S. poverty thresholds.

Definitions for Each Measure of Economic Status

Ratio: Ratio of mean value for nonmetropolitan households to mean value for metropolitan households.

Total annual household income: Reported household before-tax income excluding the value of food stamps.

Per capita annual household income: Total household income divided by household size.

Equivalent annual household income: Total household income divided by the household equivalence factor.

Total annual household expenditure: Sum of four quarters of reported total household expenditure.

Per capita annual household expenditure: Total household expenditure divided by household size.

Equivalent annual household expenditure: Total household expenditure divided by the household equivalence factor.

Total financial assets (total sample): Sum of money in savings, checking and brokerage accounts, U.S. savings bonds, stocks, bonds, mutual funds, and securities for the total sample of 751 nonmetropolitan and 2,583 metropolitan households.

Total financial assets (subsample): Total financial assets for the subsample of 526 nonmetropolitan and 1,879 metropolitan households with some positive amount of financial assets.

The poverty thresholds are the most widely recognized absolute standard of need in the United States and are commonly used in studies of relative economic status. The 1994 poverty thresholds used in this research are for households with a householder 65 years old or older and containing no related children under age 18. The equivalence factor was calculated by dividing the poverty threshold for a given household size by the poverty threshold for a one-person household. For example, the poverty threshold for a two-person household ($8,958) was divided by the poverty threshold for a one-person household ($7,108) to yield an equivalence factor of 1.26 for a two-person household.

According to this scale, an elderly couple needs 26 percent more income than a single elderly person needs to achieve the same level of well-being. This implies large returns-to-scale in consumption. In contrast, budget share-based scales typically have smaller returns-to-scale. The relative economic status of nonmetropolitan and metropolitan elderly households does not change substantively when a budget-share scale is used instead of the implicit scale in the poverty threshold *(4)*.

The assumptions regarding economies of scale underlying the various measures are different: Total household income or expenditure assumes infinite economies of scale, per capita income or expenditure assumes no economies of scale; and equivalent income or expenditure assumes finite economies of scale and thus is between the two extremes.

The value of household financial assets was used as a separate indicator of economic status because these assets are very liquid and are commonly used by elderly households to purchase goods and services. Home equity represents a less liquid asset than do financial assets, and the appropriate treatment of home equity in the analysis of relative economic status is much more controversial. Home equity is the most important component of wealth for elders. The same is true for other age groups in the United States.

However, elders' ability to use this wealth to purchase other goods and services requires them to sell their house or use market mechanisms such as second mortgages, home equity loans, and reverse mortgages to convert home equity to a more liquid form. In reality, most retired elderly people do not sell their homes or use reverse mortgages to finance their consumption *(18)*. Therefore, in this research, we excluded home equity from the measures of economic status. A dichotomous variable equal to one if the reference person was a homeowner, zero otherwise, was included as an independent variable in the multivariate analysis. This controlled for any correlation between home ownership and income, expenditure, and financial assets.

Excluding home equity has two potentially opposing effects. Most elderly own their homes, but home ownership varies by nonmetropolitan and metropolitan residence. Nonmetropolitan elderly households are more likely than their metropolitan counterparts to own their homes and to do so without a mortgage. (In the sample, 83 percent of nonmetropolitan and 77 percent of metropolitan elders were homeowners. Seventy-three percent of nonmetropolitan and 62 percent of metropolitan elders owned their home without a mortgage.) However, home equity also varies by nonmetropolitan and metropolitan residence. The median value of homes is higher in metropolitan areas than in nonmetropolitan areas, a reflection, in part, of the higher land values in metropolitan areas *(21)*.

Relative to the economic status of metropolitan elderly households, home ownership rates for nonmetropolitan elderly households would improve their economic status, and lower home values would lower it. Thus, it is difficult to determine the net effect of excluding home equity on our results regarding the relative economic status of nonmetropolitan and metropolitan elderly households. However, it is likely that ignoring home equity as an economic resource is more critical in intergenerational comparisons of economic status than in nonmetropolitan and metropolitan comparisons among elderly households. The influence of home ownership, home equity, and housing choice on the relative economic status of nonmetropolitan and metropolitan elderly households is an important topic for further research.

Empirical Analysis

First, we compared the measures of economic status between nonmetropolitan and metropolitan elderly households. We used two sample t-tests to identify statistically significant differences in the mean value of the measures of economic status between nonmetropolitan and metropolitan elderly households. Then, we calculated nonmetropolitan to metropolitan ratios for each measure of economic status to determine the magnitude of differences between the groups. A ratio of one indicates equivalent economic status at the mean values; a ratio less than one indicates lower economic status of nonmetropolitan elderly households relative to metropolitan elderly households.

Second, differences in economic status of nonmetropolitan and metropolitan elderly households may be partially explained by differences in demographic characteristics that are related to economic status. Hence we summarized demographic characteristics and used appropriate statistical tests to identify characteristics that were significantly different between nonmetropolitan and metropolitan elderly households.

Third, we used multivariate regressions to examine determinants of economic status and to ascertain whether nonmetropolitan and metropolitan differences remained when demographic characteristics were controlled. Regression equations were estimated on the total sample of elderly households, and a dichotomous variable for nonmetropolitan residence was included as an explanatory variable. Separate equations were estimated for each measure of economic status.

Results

Comparisons of Economic Status of Nonmetropolitan and Metropolitan Elderly Households

The eight measures of economic status produced consistent results (table 1). In general, adjusting the measures for household need reduced the magnitude of the nonmetropolitan and metropolitan differences between elderly households, and the differences were larger based on expenditure measures, compared with income measures. However, the magnitude of these differences was never greater than 3 percentage points.

What was the economic status of nonmetropolitan elderly households—compared with their metropolitan counterparts? Results showed that the mean values of measures of economic status for nonmetropolitan elderly households were lower than those for metropolitan elderly households. This was true for all measures analyzed in this research. Ratios showed that nonmetropolitan elderly households had 80 to 83 percent as much income and spent 79 to 82 percent as much as their metropolitan counterparts. The equivalent and per capita measures of income and expenditure produced nonmetropolitan and metropolitan ratios that were slightly larger (indicating smaller differences) than the ratios based on total income and total expenditure. Differences in ratios for financial assets were more pronounced between the two groups. For the total sample, the value of financial assets for nonmetropolitan elderly households was 72 percent as much as that of their metropolitan counterparts. Among those households with some positive amount of financial assets, the ratio for financial assets increased to 75 percent.

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Demographic Characteristics of Nonmetropolitan and Metropolitan Elderly Households

The demographic characteristics of nonmetropolitan and metropolitan elderly households were significantly different (table 2). Compared with metropolitan elderly households, higher percentages of reference persons in nonmetroplitan elderly households were male, White, and married. The percentage of reference persons with at least a high school diploma was higher for metropolitan households, compared with nonmetropolitan households. A higher percentage of nonmetropolitan elders owned their homes and reported that there were no earners in the household. The age of the reference person in nonmetropolitan versus metropolitan households did not differ significantly.

Table 1. Mean value of measures of economic status of nonmetropolitan and metropolitan elderly households

Measure of economic status	Nonmetropolitan (N=751)	Metropolitan (N=2,583)	Ratio[1]
Total annual household income	18,157 (15,716)	22,715 (19,730)	0.80
Per capita annual household income	11,635 (9,605)	13,970 (10,567)	0.83
Equivalent annual household income	15,282 (12,620)	18,615 (14,690)	0.82
Total annual household expenditure	16,247 (10,619)	20,449 (14,843)	0.79
Per capita annual household expenditure	10,608 (6,434)	12,934 (8,626)	0.82
Equivalent annual household expenditure	13,774 (8,419)	16,956 (11,389)	0.81
Total financial assets (total sample)[2]	18,763 (36,174)	26,079 (47,022)	0.72
Total financial assets (subsample)[3]	26,788 (40,669)	35,850 (51,860)	0.75

Note: Standard deviations are in parentheses. There are statistically significant nonmetropolitan and metropolitan differences at the mean value of all measures of economic status at the 99-percent confidence level. The two sample t-test was used. The test statistic was constructed as $(X_1-X_2)/(s_1^2/n_1 + s_2^2/n_2)$ where X_i, s_i^2, and n_i are the mean, estimate of variance, and number of observations for the ith sample. The test statistic has a t-distribution.

[1]Ratio of mean value for nonmetropolitan households to mean value for metropolitan households.

[2]Sum of money in savings, checking and brokerage accounts, U.S. savings bonds, stocks, bonds, mutual funds, and securities for the total sample of 751 nonmetropolitan and 2,583 metropolitan households.

[3]Total financial assets for the subsample of 526 nonmetropolitan and 1,879 metropolitan households with some positive amount of financial assets.

Nonmetropolitan and metropolitan differences in gender, race, and marital status would suggest higher economic status for nonmetropolitan households relative to metropolitan households; differences in education and presence of at least one earner in the household would suggest higher economic status for metropolitan households, compared with nonmetropolitan households.

Previous research documents the correlation of age, education, gender, race, and marital status with economic status of elderly persons *(2,3,7,8,11,13)*. Differences in the composition of elderly households in nonmetropolitan and metropolitan areas suggest that economic status should be higher in nonmetropolitan areas (the exceptions: education and presence of at least one earner in the household). However, across all measures of economic status that we analyzed, economic status is lower among nonmetropolitan elderly households. To separate the contribution of demographic composition and nonmetropolitan residence, we used multivariate analysis to examine the magnitude of nonmetropolitan and metropolitan differences in economic status, controlling for differences in demographic characteristics.

Determinants of the Economic Status of Elderly Households

We used multivariate regression analysis to determine whether the nonmetropolitan and metropolitan difference in economic status remained—once the independent effects of demographic characteristics were controlled. Multivariate regression results show the effect of each independent variable while simultaneously controlling for the effects of all other independent variables.

Each measure of economic status was used as an independent variable in separate equations. The independent variables included measures of age, education, gender, marital status, and race of the reference person; home ownership; earners; and nonmetropolitan and metropolitan residence. We measured each as follows:

- Age and education—with categorical, dichotomous variables to allow for nonlinear effects on economic status.
- Age of the reference person—with three categorical dichotomous variables: 65 to 74 years of age (the reference category), 75 to 84 years of age, and 85 years and over.
- Educational attainment of the reference person—with five categorical, dichotomous variables: Elementary school or less including no formal schooling (the reference category), at least some high school, high school graduation, at least some college, and college graduation or more.

- Gender of the reference person—with a dichotomous variable equal to one if the reference person was male.
- Marital status—with a dichotomous variable equal to one if the reference person was married. Thus, reference persons who were widowed, divorced, separated, or never married were all coded as zero.
- Race—with a dichotomous variable equal to one if the reference person was White.
- Home ownership—with a dichotomous variable equal to one if the reference person was a homeowner.
- Earners—with a dichotomous variable equal to one if there were no earners in the household.
- Residence—with a dichotomous variable equal to one if the reference person lived in a nonmetropolitan area, zero otherwise.

The effects of the independent variables on economic status are similar across the measures of economic status, with most of the independent variables having statistically significant effects. Table 3 presents statistically significant results.[2]

[2]The R^2 statistic is a commonly used index of how well an estimator fits the sample data. The R^2 statistic indicates the percentage of the variation in the dependent variable that is explained linearly by the variation in the set of independent variables. The R^2 statistic adjusted to account for degrees of freedom is called the ''adjusted-R^2.'' R^2 statistics are sensitive to the range of variation of the dependent variable; in general, measures of R^2 are inversely related to the amount of variation in the dependent variable. The adjusted-R^2 statistics for the eight regression models estimated in this research vary in a manner consistent with our expectations. The amount of variation in the financial asset variables is large relative to the amount of variation in the income and expenditure measures, resulting in lower measures of R^2 in the models for financial assets. In general, the R^2 measure is largest for total income (expenditure), slightly smaller for equivalent income (expenditure), and declines further for per capita income (expenditure).

Table 2. Characteristics of elderly households by nonmetropolitan and metropolitan residence[1]

Characteristic[2]	Total (N=3,334)	Nonmetropolitan (N=751)	Metropolitan (N=2,583)
		Percent	
Reference person			
Age (in years)			
65 - 74	57	55	58
75 - 84	35	36	34
85 and over	8	9	8
Education***			
Elementary school or less	25	36	22
Some high school	18	18	18
High school graduate	29	25	30
Some college	15	12	16
College graduate or more	13	9	14
Male**	54	58	53
Married***	46	49	45
White***	89	95	88
Household			
Homeowner***	78	83	77
No earners**	70	73	69

[1]Data are column percentages.
[2]The test statistic for the categorical and dichotomous variables was constructed as $\Sigma(O_i - E_i)^2/E_i$ where O_i and E_i refer to the observed and expected frequency, respectively, for a given cell. The test statistic has a chi-square distribution.
**Characteristics between nonmetropolitan and metropolitan elderly households are significantly different at $p \leq .01$.
***Characteristics between nonmetropolitan and metropolitan elderly households are significantly different at $p \leq .001$.

Across all measures of economic status, households with a reference person who was more highly educated, male, White, and a homeowner had higher economic status, compared with counterparts. All other things equal, metropolitan elderly households, on average, had higher economic status than did nonmetropolitan elderly households.

The effects of age, being married, and having no earners in the household varied with the specific measure of economic status. Age did not have a statistically significant effect on income measures of economic status for elderly households when the other variables were controlled. However, age was negatively associated with expenditure measures of economic status and positively associated with financial asset measures of economic status.

Being married was positively associated with all but the per capita measures of economic status. This result is reasonable,

Table 3. Multivariate regression: Measures of economic status[1,2]

	Total annual household income	Per capita annual household income	Equivalent annual household income	Total annual household expenditure	Per capita annual household expenditure	Equivalent annual household expenditure	Total financial assets (total sample)	Total financial assets (subsample)
Intercept	14721.00	10175.00	11961.00	10521.00	7899.97	8820.03	-11729.00	-13794.00
				Coefficients				
Age of reference person (omitted: 65-74 years)								
75-84 years				-1257.92	-760.93	-1022.86		5980.51
85+ years						-1263.44	10146.00	16018.00
Education of reference person (omitted: elementary school or less)								
Some high school	2145.07	1132.21	1615.10					
High school graduate	5221.65	3651.99	4606.46	2716.71	2410.33	2688.87	13998.00	16331.00
Some college	8683.65	5514.70	7289.64	6659.47	4584.19	5808.73	17902.00	17871.00
College graduate+	15364.00	10323.00	13256.00	12116.00	8214.30	10517.00	33531.00	36685.00
Male	3282.39	2481.22	2890.71	1819.36	1199.98	1520.04	7953.43	9422.05
Married	8286.53	-2642.17	3341.77	7287.01	-2237.65	3018.43	4289.77	7726.08
White		2359.44	2165.56	3529.52	2967.45	3377.94	11517.00	13605.00
Homeowner	3528.59	1640.94	2607.92	2231.84	780.45	1504.85	9174.80	11602.00
No earners	-10450.00	-3271.27	-6359.07	-6077.04	-1154.47	-3195.37		
Nonmetropolitan	-3711.23	-1659.44	-2577.81	-3762.53	-1848.67	-2737.83		-8241.85
Adjusted R^2	0.3063	0.1643	0.2469	0.3267	0.1569	0.2457	0.1059	0.1082
F value	123.640	55.612	92.049	135.772	52.702	91.463	33.901	25.316
N	3334	3334	3334	3334	3334	3334	3334	2405

[1]Statistically significant coefficients only, $p \leq .05$.
[2]Detailed tables are available from the second author.

because the multivariate analysis revealed the effect of being married, while holding income constant. Because being married was positively correlated with household size, it would be negatively correlated with a per capita measure.

Having no earners in the household was negatively associated with the income and expenditure measures of economic status but did not have a statistically significant effect on financial asset measures of economic status.

The multivariate analysis confirmed this: the nonmetropolitan and metropolitan differences in economic status persisted even after controlling for age, education, gender, marital status, race, home ownership, and presence of at least one earner in the household. Multivariate results showed that nonmetropolitan elderly households had 83 to 88 percent of the income, and spent 81 to 85 percent as much as metropolitan elderly households spent (table 4). Similarly to the bivariate results presented in table 1, the eight measures of economic status produced consistent results regarding the relative economic status of nonmetropolitan and metropolitan elderly households. In general, adjusting the measures for household need reduced the magnitude of the nonmetropolitan and metropolitan differences, and the differences were larger based on expenditure measures, compared with income measures. However, the magnitude of these differences was never greater than 5 percentage points.

Table 4. Measures of economic status of nonmetropolitan and metropolitan elderly households based on multivariate results

Measure of economic status	Coefficient on nonmetropolitan variable[1]	Sample mean value[2]	Ratio[3]
Total annual household income	-3,711	21,706 (19,010)	0.83
Per capita annual household income	-1,659	13,444 (10,402)	0.88
Equivalent annual household income	-2,578	17,864 (14,316)	0.86
Total annual household expenditure	-3,763	19,502 (14,112)	0.81
Per capita annual household expenditure	-1,849	12,410 (8,240)	0.85
Equivalent annual household expenditure	-2,738	16,239 (10,872)	0.83
Total financial assets (total sample)[4]	-6,692	24,431 (44,908)	0.73
Total financial assets (subsample)[5]	-8,242	33,868 (49,762)	0.76

Note: Standard deviations are in parentheses.
[1]Estimated coefficient on the nonmetropolitan dichotomous variable in the regression equation for each measure of economic status.
[2]Mean value of the measure of economic status for the total sample (N=3,334).
[3]Ratio of mean value for nonmetropolitan households to the mean value for metropolitan households implied by the multivariate results. The actual ratio was calculated as 1 + (estimated coefficient/sample mean value).
[4]Sum of money in savings, checking and brokerage accounts, U.S. savings bonds, stocks, bonds, mutual funds, and securities for the total sample of 751 nonmetropolitan and 2,583 metropolitan households.
[5]Total financial assets for the subsample of 526 nonmetropolitan and 1,879 metropolitan households with some positive amount of financial assets.

After geographic differences in population composition are controlled, nonmetropolitan elderly households still have lower relative economic status, but the magnitude of the nonmetropolitan and metropolitan differences becomes slightly smaller.

What about the ratios for assets? The nonmetropolitan and metropolitan ratio of total financial assets was 73 percent for the total sample and 76 percent for the subsample when differences in demographic characteristics were controlled. These nonmetropolitan and metropolitan ratios were larger (indicating smaller differences) than the ratios that did not control for differences in demographic characteristics (table 1).

These results suggest that some portion of the nonmetropolitan and metropolitan differences in economic status is due to differences in demographic characteristics of the nonmetropolitan and metropolitan elderly households. However, the result that the measures of economic status of nonmetropolitan elderly households are never greater than 88 percent of the comparable measures for metropolitan elderly households confirms the persistence of relatively lower economic status of nonmetropolitan elderly households.

Summary

Nonmetropolitan elderly households have lower economic status, on average, than metropolitan elderly households have—across measures based on income, expenditure, and financial assets. The magnitude of the nonmetropolitan and metropolitan difference in economic status varies slightly with the specific measure used. The bivariate results indicate that the economic status of nonmetropolitan elderly households is 17 to 21 percent lower than the economic status of metropolitan elderly households, depending on the income or expenditure measure used.

After geographic differences in population composition are controlled, nonmetropolitan elderly households still have lower relative economic status, but the magnitude of the nonmetropolitan and metropolitan differences becomes slightly smaller. However, the actual magnitude of the difference is still fairly large. Based on the multivariate results, the economic status of nonmetropolitan elderly households is 12 to 19 percent lower than the economic status of metropolitan elderly households, that is, depending on the income or expenditure measure used.

Implications

The explanation for the lower economic status of nonmetropolitan elderly households does not lie completely in variation in population composition. One plausible explanation is that the lower economic status of nonmetropolitan elderly households results from the more limited "opportunity structure" in nonmetropolitan areas. Persons living in nonmetropolitan areas have poorer employment experiences, resulting from both lower educational attainment and poorer employment opportunities available in nonmetropolitan areas *(5)*. The lower lifetime earnings result in lower economic status in later life.

Economic resources are only one factor contributing to overall well-being or quality of life. Quality of life is influenced by access to goods and services through the marketplace and through nonmarket production (objective factors), as well as by subjective factors: including emotional well-being, life satisfaction, and support networks.

Price levels, which influence access to goods and services through the marketplace, and nonmarket production are likely to differ between nonmetropolitan and metropolitan areas. If prices in nonmetropolitan areas are systematically lower than prices are in metropolitan areas and if nonmarket production is greater in nonmetropolitan areas than in metropolitan areas,[4] then actual nonmetropolitan and metropolitan differences in levels of well-being will be much smaller than indicated by this research. It is possible that nonmetropolitan elderly households actually enjoy higher levels of well-being than their metropolitan counterparts, when differences in price levels and nonmarket production are considered.

Subjective factors are more difficult to measure than income or expenditure but should be considered for a more comprehensive assessment of the overall well-being of the elderly. Previous research documents conflicting evidence regarding the correlation between objective and subjective dimensions of well-being. (For an overview of research on subjective dimensions of well-being, see Lee and Lassey *(9)*). The notion that metropolitan elderly fare better than nonmetropolitan elderly in objective terms and therefore should also fare better on measures of subjective well-being is not confirmed in empirical research. In a study of rural and urban elderly, the rural elderly scored as well or better than urban elderly scored on measures of subjective well-being *(9)*. Further research should explore the causal processes of subjective well-being and the contribution of subjective factors to overall well-being and quality of life.

The overrepresentation of the elderly in rural and nonmetropolitan areas may suggest that elderly people perceive the quality of life to be higher in nonmetropolitan areas and prefer living in these areas. People in metropolitan areas who prefer nonmetropolitan living may relocate to nonmetropolitan areas later in life. However, less than 10 percent of those aged 65 and over move to a new house. And of those elderly people who move, less than 10 percent leave a metropolitan area and move to a nonmetropolitan area *(19)*.

Overall well-being and quality of life are influenced by both objective and subjective factors. Therefore, low relative economic status associated with nonmetropolitan residence should not be ignored. Because of nonmetropolitan and metropolitan differences in residential and employment opportunities, a blanket approach to improving economic status will not be effective. Different problems and needs demand different solutions.

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[4] Nonmarket production is likely higher in nonmetropolitan areas than in metropolitan areas. Why? Because nonmetropolitan elders are more likely than metropolitan counterparts to have extended family structures and more highly developed community networks for support.

Most policy aimed at improving economic status focuses on human capital strategies. Public policy designed to increase human capital through increased and better education and employment opportunities should be effective in improving economic status of young people throughout their lives including their later years. Further, improving employment prospects of working-age persons through job training and retraining should effectively raise the economic status of prime-age Americans. However, strategies to improve the economic status of elderly Americans, and specifically elderly Americans living in nonmetropolitan areas, cannot rely on efforts to increase human capital. Strategies to improve the economic status of the elderly today must focus on improving the level of income transfers to persons with low lifetime earnings and interrupted labor force participation. Forward-looking strategies for improving the economic status of future groups of elders need to focus on availability and access to good jobs that help individuals acquire adequate financial resources for retirement.

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